

[Time: 3 Hours]**[Marks:80]**

Please check whether you have got the right question paper.

- N.B:**
1. Questions number 1 is compulsory.
 2. Solve any three questions from the remaining five questions
 3. Draw neat sketches wherever required.

- Q.1** A Compare plasma, LED and LCD displays? **5**
B In TV why AM is preferred over FM for picture modulation? **5**
C What are the advantages of using digital technologies for television system? **5**
D Explain compatibility considerations in TV system? **5**
- Q.2** A Explain interlaced scanning with a neat diagram and also explain how it is better than sequential scanning? **10**
B Explain working of image orthicon camera tube with a neat sketch. Also state its draw backs? **10**
- Q.3** A Explain in detail Direct to Home TV (DTH)? **10**
B Explain the need of chroma sub sampling .Explain various types. **10**
- Q.4** A Discuss the following terms W.R.T. color transmission? **10**
i) Luminance, chrominance and saturation.
ii) Additive and subtractive mixing.
B Explain the following terms in relation to digital TV. **10**
i) Aspect ratio, ii) Viewing distance and angle iii) Digitization.
- Q.5** A Only (R-Y) and (B-Y) color difference signal along with luminance signal is chosen for color transmission and (G-Y) is not transmitted .justify? **10**
B Compare NTSC, PAL and SECAM TV standards? **10**
- Q.6** Write short notes on **20**
1 High definitions television (HDTV)
2 Chromaticity diagram
3 MUSE system
4 Color killer circuit